

K. E. Fields, General Manager

October 5, 1955

C. L. Dunham, M.D., Director  
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## TRANSMITTAL OF REPORTS ON MARSHALL ISLANDS RADIOLOGICAL SURVEY

SYMBOL: BMBP:WDC

Pursuant to the request of Dr. W. F. Libby for data on the radiological surveys of the Marshall Islands, I am sending herewith a copy of the NRDL report and a copy of the University of Washington report.

The draft letter to D. H. Nucker, recommending deferment of repatriation at this time, was based on a thorough study of these two reports by Dr. G. M. Dunning. A sizeable quantity of Dr. Dunning's notes are available in his files, but because of his rush to evaluate the data for the recommendation before he left on a 10-day trip, these notes have not been compiled into a formal summary which I can submit for your consideration.

Briefly, however, they indicate the following:

	<u>Donaldson</u>	<u>NRDL</u>
Edible plants	a) 1.6 x mpc	Gross activity half of Donaldson's
Fish muscle	b) 3.4 x mpc	c) 0.24 x mpc
Fish liver	d) 135 x mpc	c) 10 x mpc
Crab and clam muscle	d) 34 x mpc	c) 2.4 x mpc
Bird muscle	2 x mpc	—
Rooster	—	7 x mpc

mpc is maximum permissible concentration, based primarily on Sr content.

- a) Donaldson: 2.2% Sr-90 measured June-July 1955  
 b) Donaldson: 5.7% Sr-89 plus Sr-90, estimated 2.8% Sr-90.  
 c) NRDL: about 0.3% Sr-90 reported.  
 d) Donaldson: Assumed 2.8% Sr-90 - no analyses

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There is evidence that the activity in both the environment and in foodstuffs is decreasing about as  $t^{-1.7}$ , from which we deduce that the radioactivity in the Marshalls will be down to permissible levels for unrestricted consumption in the spring of 1956.

In view of these indications, plus the fact that a re-survey of the islands is now being planned to take place in January, with special emphasis on obtaining data to check the above inferences, it has seemed to us that repatriation might well be postponed a few months longer.

We will appreciate the return of these reports when they have served your purpose.

Attachments:

UWFL-42, copy 1A

USNRDL Final Report on Atoll Resurvey Project

DISTRIBUTION: copy 1A w/att. to addressee  
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